

CLAIMS

What is claimed is:

1. An apparatus, comprising:
 - a radio comprising two or more physical layer blocks; and
 - a configuration processor to arrange the two or more physical layer blocks to communicate according to one of at least two or more radio communication protocols.
2. An apparatus as claimed in claim 1, said two or more physical layer blocks including software defined radio logic block being programmable to cause the two or more physical layer blocks to be arranged to communicate according to at least one or two or more radio communication protocols.
3. An apparatus as claimed in claim 1, further comprising a memory having a database stored thereon, the database including information to configure the two or more physical layer blocks to communicate according to one of the at least two or more radio communication protocols.
4. An apparatus as claimed in claim 1, further comprising a hub, and said radio including at least one or more media access control blocks to couple to a network through said hub.

5. An apparatus as claimed in claim 1, further comprising a beacon transceiver to transmit a beacon to a remote device, wherein a beacon transmitted by said beacon transceiver provides an indication of the one or more available radio communication protocols.

6. A method, comprising:

receiving from a remote device a reply to a transmitted beacon, the reply indicating a desired radio communication protocol;

determining whether the desired radio communication protocol is supported; and

in the event the desired radio communication protocol is supported, programming a physical layer block to communicate according to the desired radio communication protocol.

7. A method as claimed in claim 6, further comprising, if the desired communication protocol is not supported, determining whether a download of the desired radio communication protocol is available, and if available, downloading the desired radio communication protocol and programming the radio to communicate according to the desired radio communication protocol.

8. A method as claimed in claim 6, further comprising determining whether a physical layer block is currently programmed to operate according to the desired radio communication protocol, and if so, communicating with the remote device according to the desired radio protocol, and if not currently programmed, then programming at least one physical layer block to operate according to the desired radio communication protocol and then communicating with the remote device according to the desired radio communication protocol.

9. A method as claimed in claim 6, determining whether there is an available physical layer block, and if a physical layer block is not available, reprogramming a physical layer block having a lower frequency of use to operate according to the desired radio communication protocol.

10. A method as claimed in claim 6, further comprising programming two or more physical layer blocks to communicate according to two or more radio communication protocols, and coupling the physical layer blocks to a network through a hub.

11. An article comprising a storage medium having stored thereon instructions that, when executed by a computing platform, result in arranging an access point to operate using a desired radio communication protocol by:

receiving from a remote device a reply to a transmitted beacon, the reply indicating a desired radio communication protocol;

determining whether the desired radio communication protocol is supported; and

in the event the desired radio communication protocol is supported, programming a physical layer block to communicate according to the desired radio communication protocol.

12. An article as claimed in claim 11, wherein the instructions, when executed, further result in arranging the access point to operate using a desired radio communication protocol by, if the desired communication protocol is not supported, determining whether a download of the desired radio communication protocol is available, and if available, downloading the desired radio communication protocol and

programming the radio to communicate according to the desired radio communication protocol.

13. An article as claimed in claim 11, wherein the instructions, when executed, further result in arranging the access point to operate using a desired radio communication protocol by determining whether a physical layer block is currently programmed to operate according to the desired radio communication protocol, and if so, communicating with the remote device according to the desired radio protocol, and if not currently programmed, then programming at least one physical layer block to operate according to the desired radio communication protocol and then communicating with the remote device according to the desired radio communication protocol.

14. An article as claimed in claim 11, wherein the instructions, when executed, further result in arranging the access point to operate using a desired radio communication protocol by, determining whether there is an available physical layer block, and if a physical layer block is not available, reprogramming a physical layer block having a lower frequency of use to operate according to the desired radio communication protocol.

15. An article as claimed in claim 11, wherein the instructions, when executed, further result in arranging the access point to operate using a desired radio communication protocol by, further comprising programming two or more physical layer blocks to communicate according to two or more radio communication protocols, and coupling the physical layer blocks to a network through a hub.

16. An apparatus, comprising:

a network interface circuit having a radio comprising two or more physical layer blocks;

an omnidirectional antenna to couple to said radio; and

a processor to arrange the physical layer block to communicate according to one of at least two or more radio communication protocols, wherein said two or more physical layer blocks have a media access layer block being implemented at least in part by said processor.

17. An apparatus as claimed in claim 16, said physical layer block including software defined radio logic block being programmable to cause the physical layer block to be arranged to communicate according to at least one or two or more radio communication protocols.

18. An apparatus as claimed in claim 16, further comprising a memory having a database stored thereon, the database including information to configure the physical layer block to communicate according to one of the at least two or more radio communication protocols.

19. An apparatus as claimed in claim 16, further comprising a hub, and said radio including at least two or more physical layer blocks and at least one or more media access control blocks to couple to a network through said hub.

20. An apparatus as claimed in claim 16, further comprising a beacon transceiver to transmit a beacon to a remote device, wherein a beacon transmitted by said beacon transceiver provides an indication of the one or more available radio communication protocols.